Alaskan Way Viaduct and Seawall Replacement Program Update

Paula Hammond
Secretary of Transportation

Dave Dye
Deputy Secretary

Steve Reinmuth
Chief of Staff

Ron Paananen
Deputy Administrator, Urban Corridors Office

John White
Program Director, Alaskan Way Viaduct and Seawall Replacement Program

Washington State Transportation Commission
Nov. 19, 2008

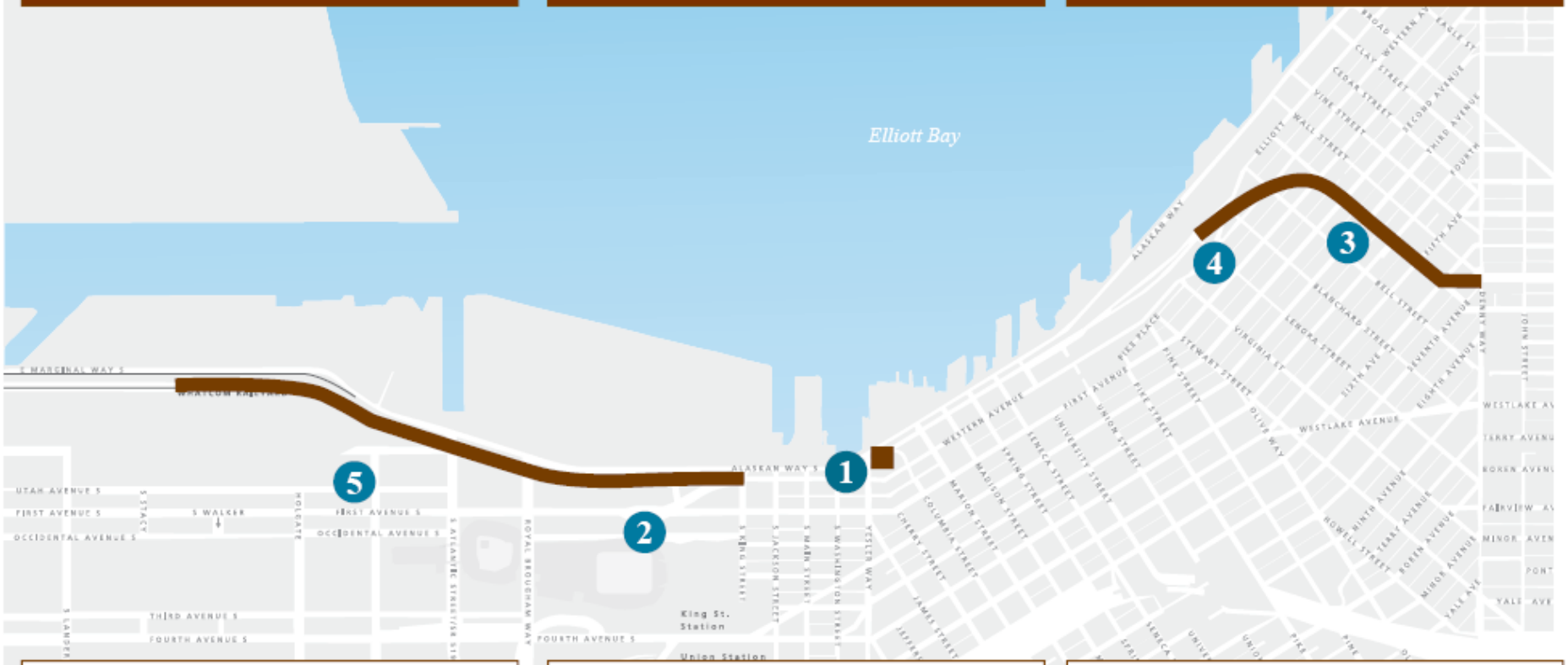
Washington State Department of Transportation

Presentation agenda

- Moving Forward projects
- SR 519 project
- Central waterfront project
- Central waterfront scenarios
- Next steps

Moving Forward projects

1. Stabilize four columns foundations between Columbia Street and Yesler Way
2. Relocate electrical lines between South Massachusetts Street and Railroad Way South
3. Upgrade the fire and life safety systems in the Battery Street Tunnel



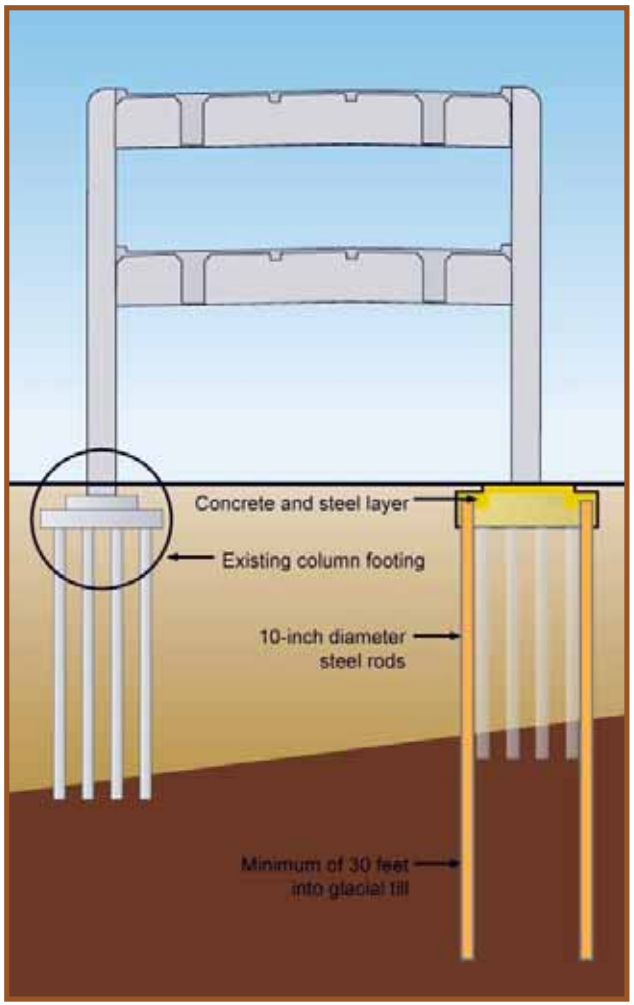
4. Stabilize the viaduct between Lenora Street and the Battery Street Tunnel
5. Replace the viaduct from South Holgate Street to South King Street
6. Implement transit enhancements and other improvements

Repair viaduct between Columbia Street and Yesler Way

- Drilled a series of steel rods into stable soil
- Placed a reinforcing layer of steel and concrete around existing footings
- Fastened the new supports to the structure

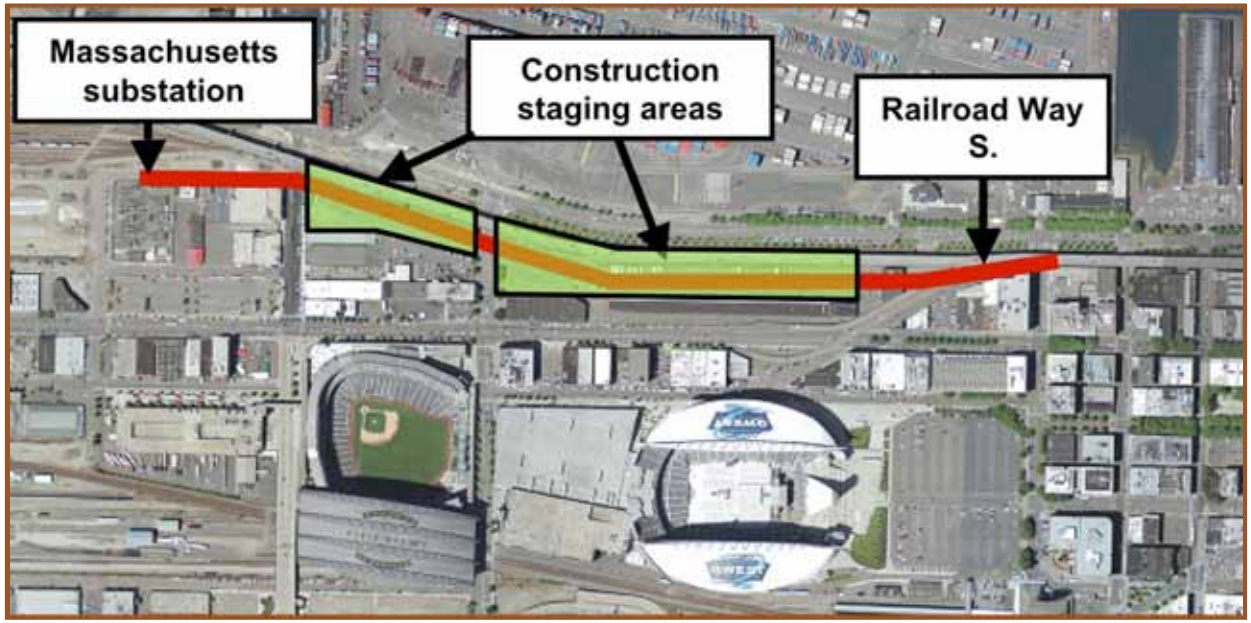
Construction: October 2007 - April 2008

Status: Complete



Relocate electrical lines between S. Massachusetts Street and Railroad Way S.

- Relocate electrical lines to locations east of the viaduct
- Majority of work will take place on private property west of First Ave. S.



Construction: September 2008 - 2009

Status: In construction

Upgrade Battery Street Tunnel

- Install new sprinkler system, new fire alarm system, new ventilation fan controls, tunnel closure signs and signals, and new lighting
- Reinforce roof beam connections and add emergency exit stairwell in southbound tunnel
- Close short on- and off-ramps just south of tunnel
- Primarily night and weekend closures during construction

Construction: 2009 – 2011

Status: In design

Replace viaduct between S. Holgate Street and S. King Street

- Remove viaduct between S. Holgate and S. King streets
- Build new section of SR 99
- This work will:
  - Improve local mobility for pedestrians, bicyclists, vehicles and freight
  - Improve access to downtown Seattle

Construction: Spring 2009 - 2012

Status: In design


S Atlantic St


HANJIN

Transit enhancements and other improvements

WSDOT, King County and the City of Seattle have agreed upon a list of projects to keep people and goods moving during SR 99 construction. These projects include:

- I-5 variable speed signs
- SR 519 freight connections
- S. Spokane Street Viaduct improvements
- Increased bus service
- Real-time traveler information

Construction: 2009 - 2012

Status: In design

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SR 519 Intermodal Access Project

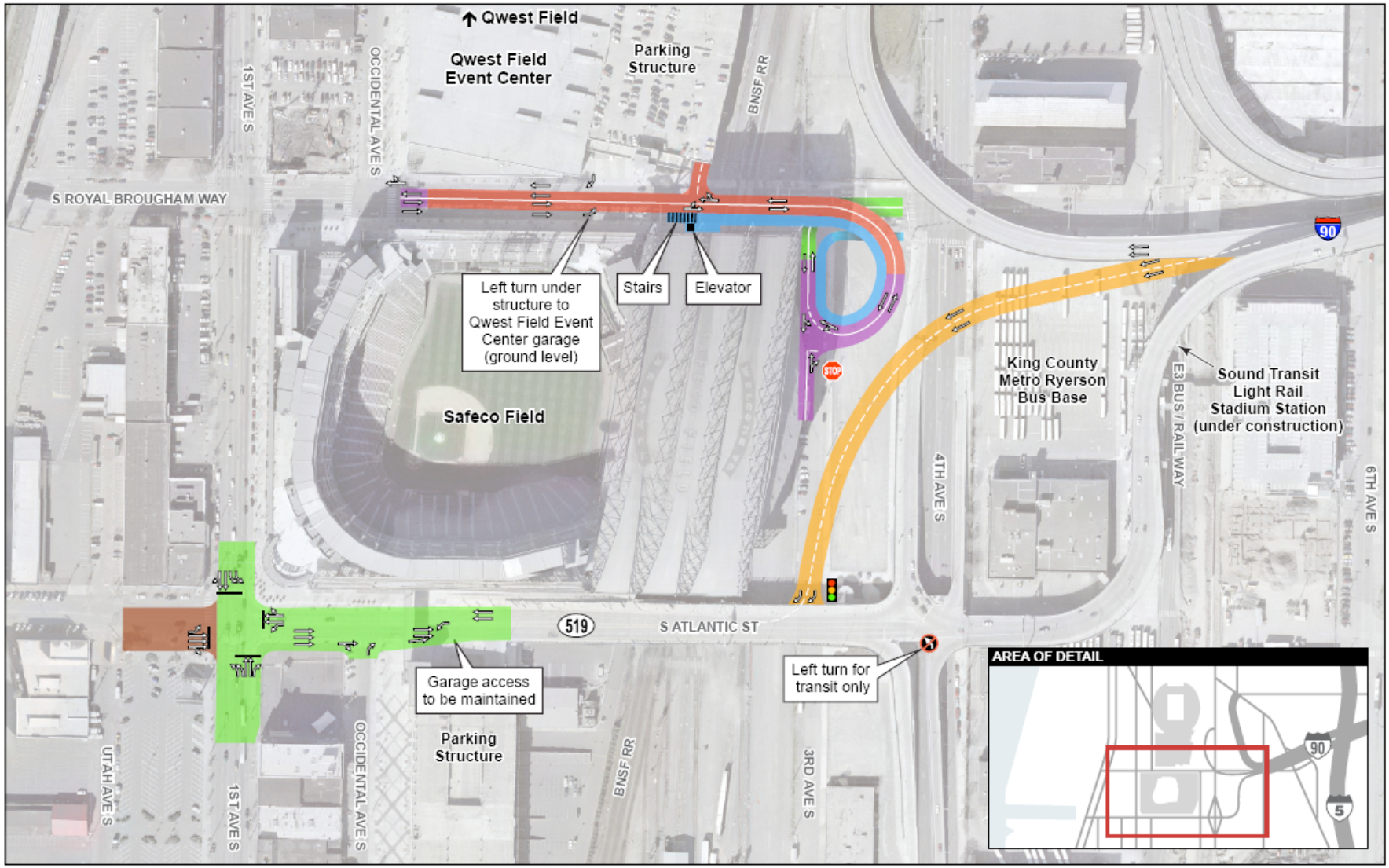
- Provides a more direct route between I-90 and I-5 and the Seattle waterfront, including:
  - Providing a new off-ramp for westbound traffic
  - Making waterfront access more efficient for freight and other vehicles
  - Improving safety and mobility by separating vehicles and pedestrians from railroad traffic on Royal Brougham Way

Construction: October 2008 – June 2010

Status: Broke ground October 23

Contracting: Design-Build

SR 519: Phase 2



The path forward

2007

Winter: Begin central waterfront planning

2008

December: Recommendation made on final alternative for central waterfront

2009

Begin design on central waterfront alternative

2012

Remaining viaduct begins to come down

Public Input

Public Input

Central waterfront project area

- Old project area addressed SR 99; new project area considers regional transportation network
- Opportunity to improve transportation system as a whole and benefit all modes

Central waterfront project

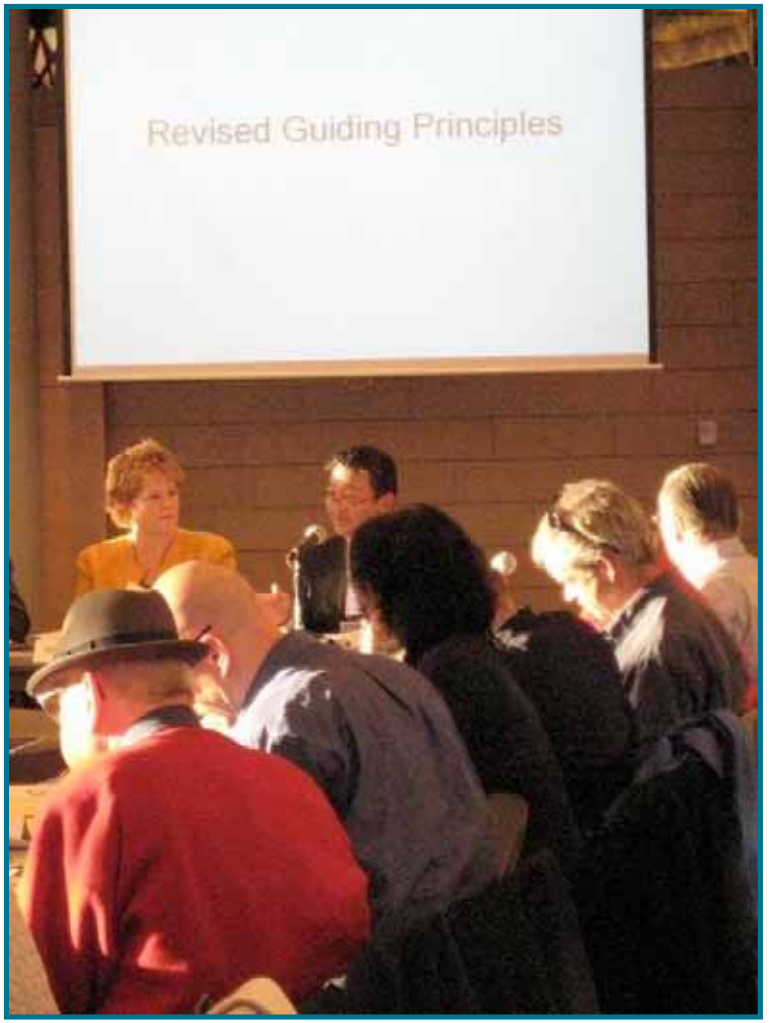
Stakeholder Advisory Committee

- 30 individuals representing communities, economic interests and cause-driven organizations
- Meets from December 2007 to December 2008
- Reviews, deliberates and comments on central waterfront work

Central waterfront project

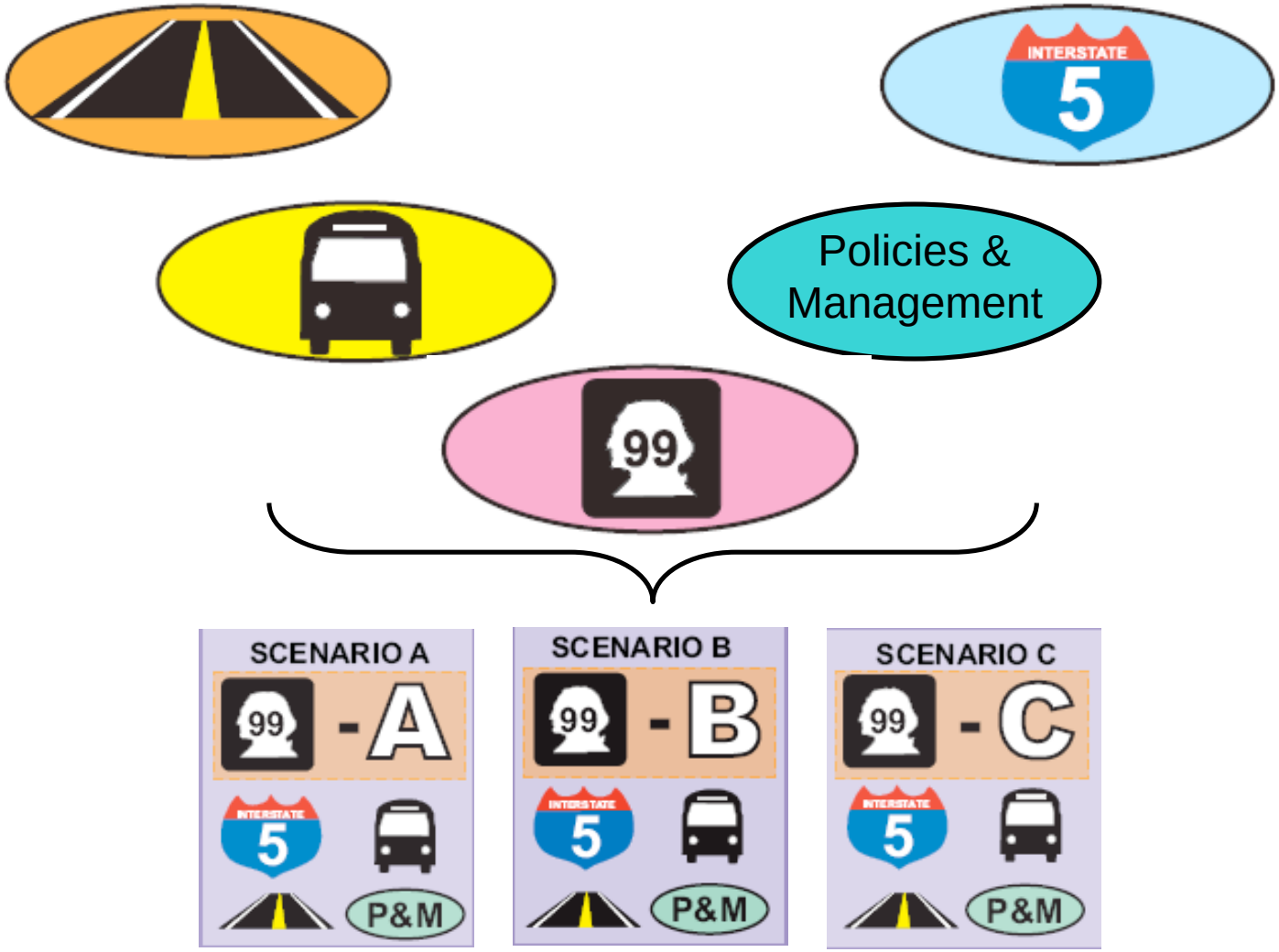
Guiding principles summary

- Improve public safety
- Provide efficient movement of people and goods now and in the future
- Maintain or improve downtown Seattle, regional, the port and state economies
- Enhance Seattle's waterfront, downtown and adjacent neighborhoods as a place for people
- Create solutions that are fiscally responsible.
- Improve the health of the environment



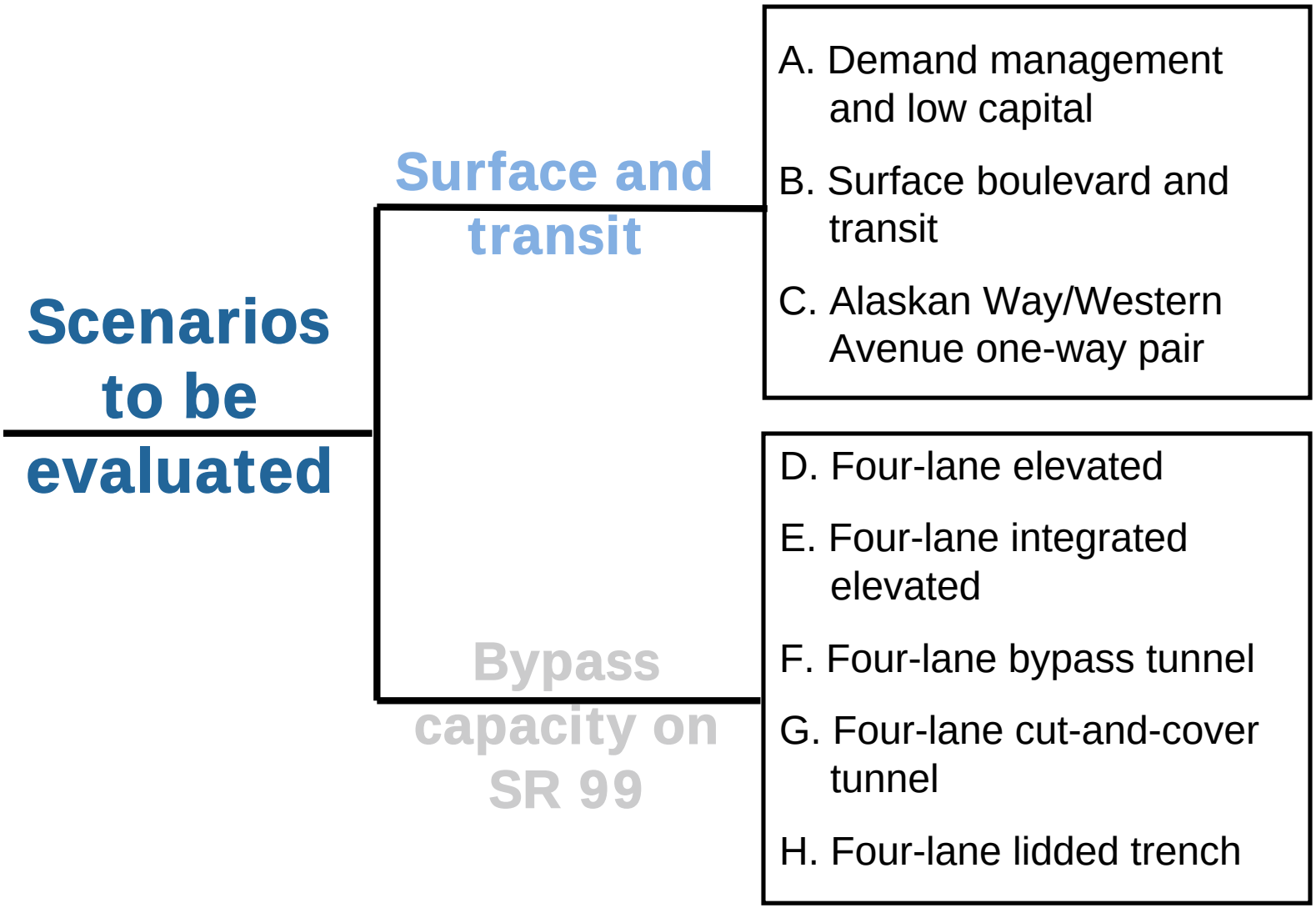
Central waterfront project

Building blocks and scenarios



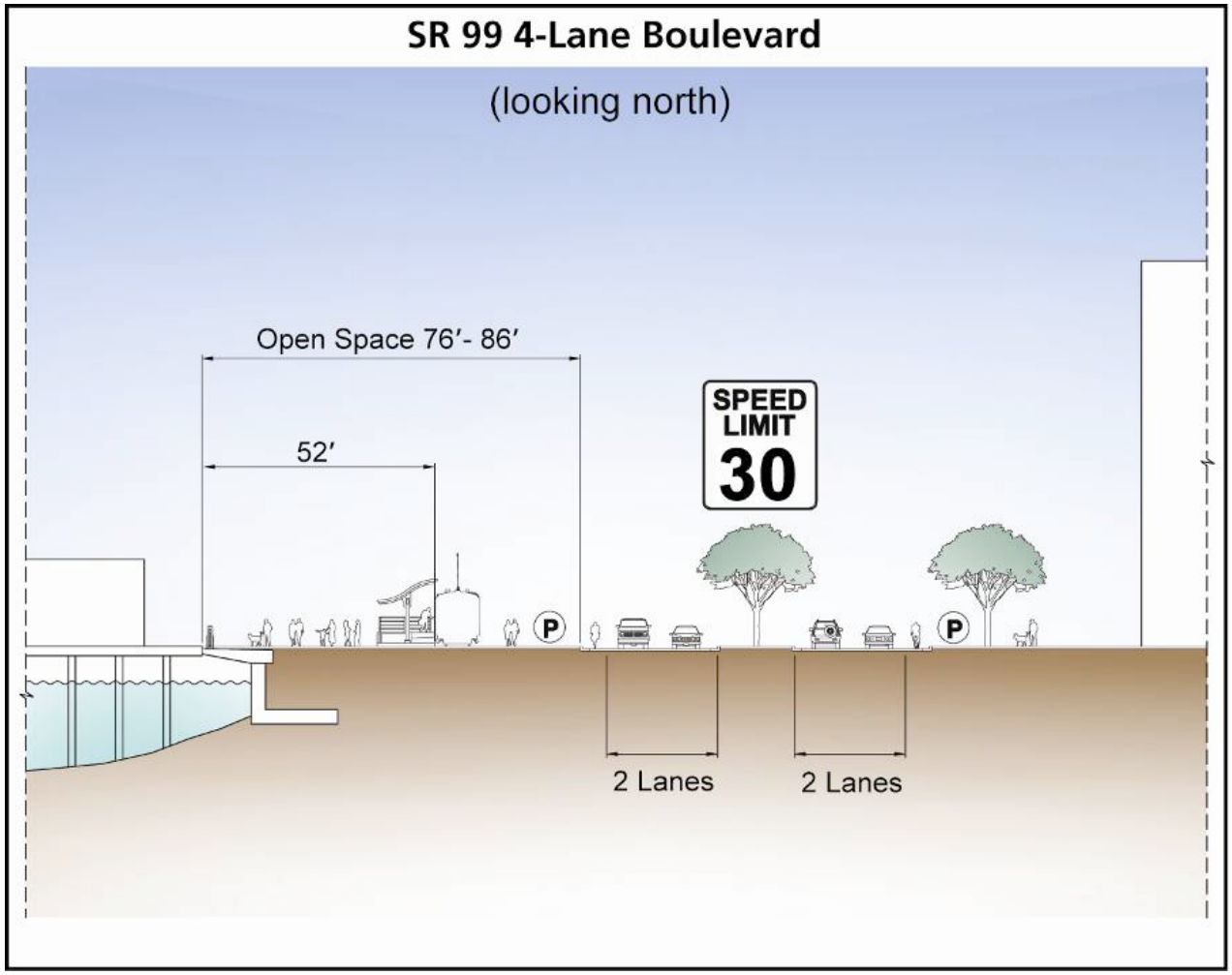
Central waterfront project

Draft scenarios



Central waterfront project

Scenario A: Demand management and low capital



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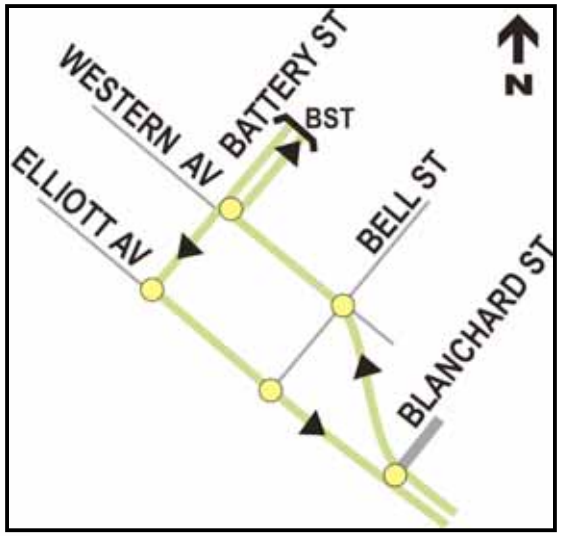
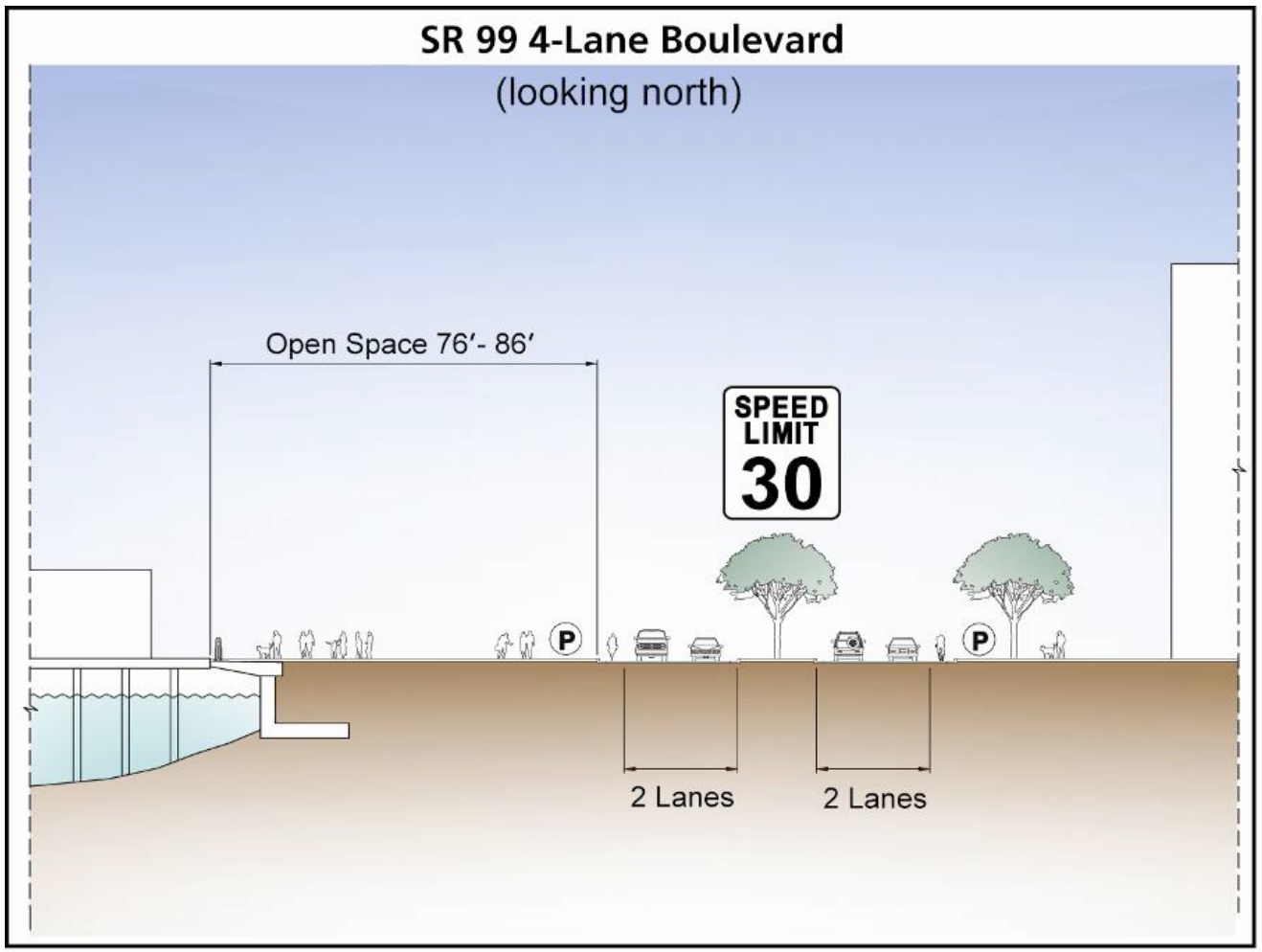


Central waterfront project

Scenario B: Surface boulevard and transit



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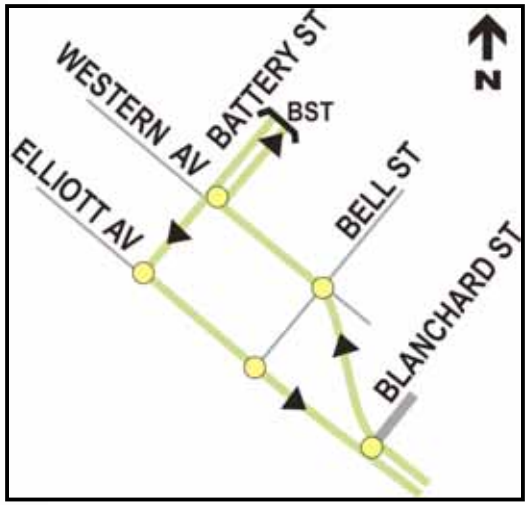
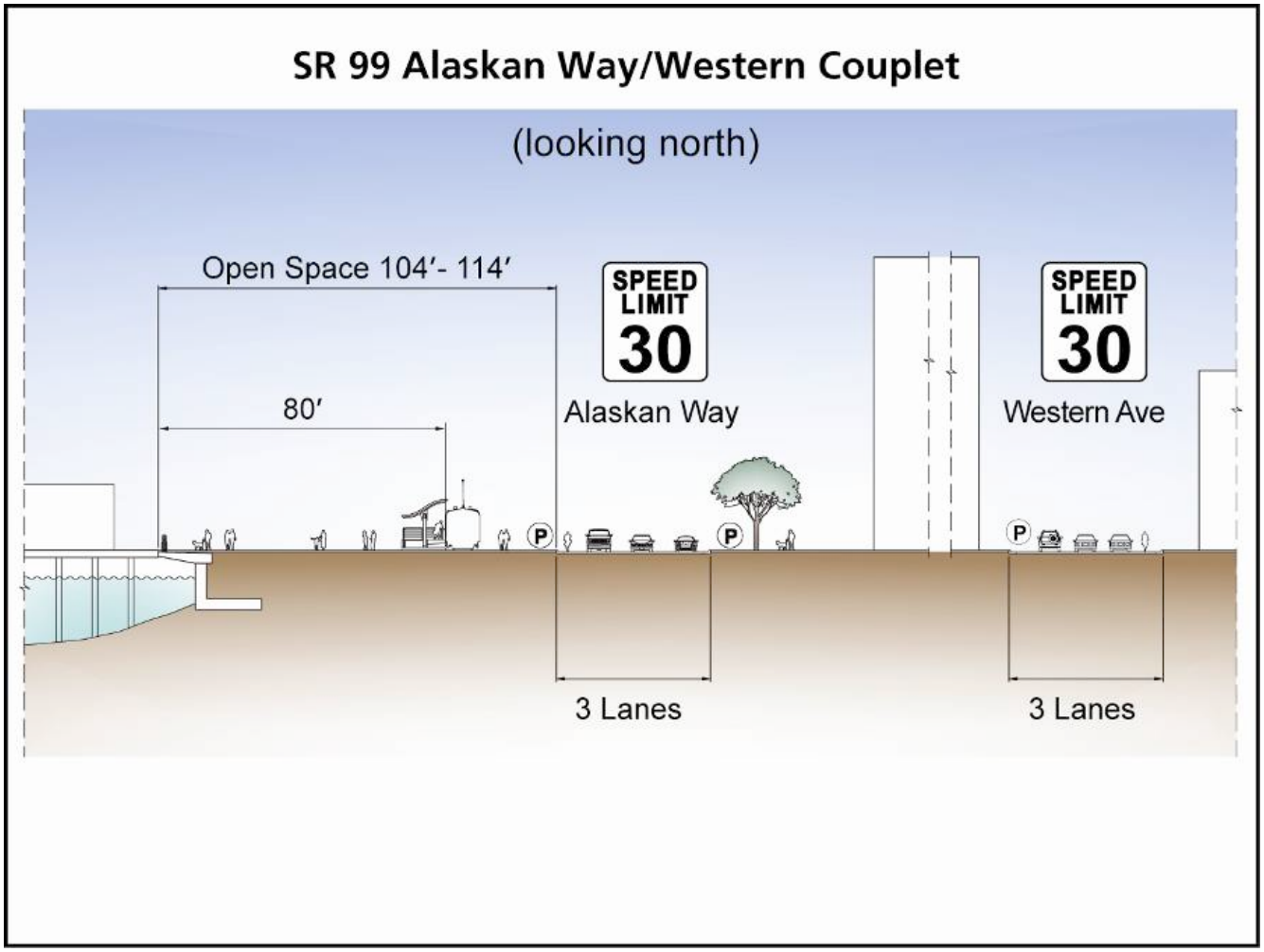


Central waterfront project

Scenario C: Alaskan Way and Western Avenue one-way pair



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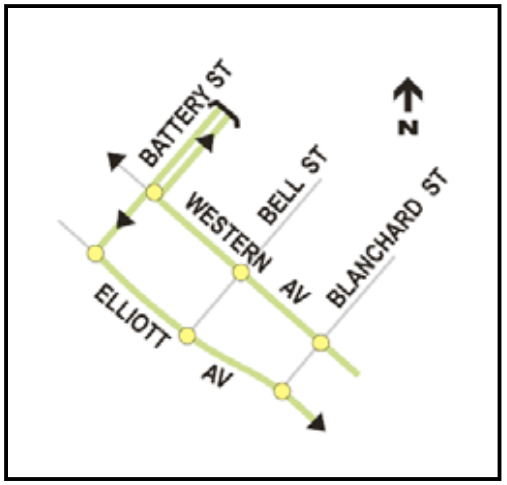
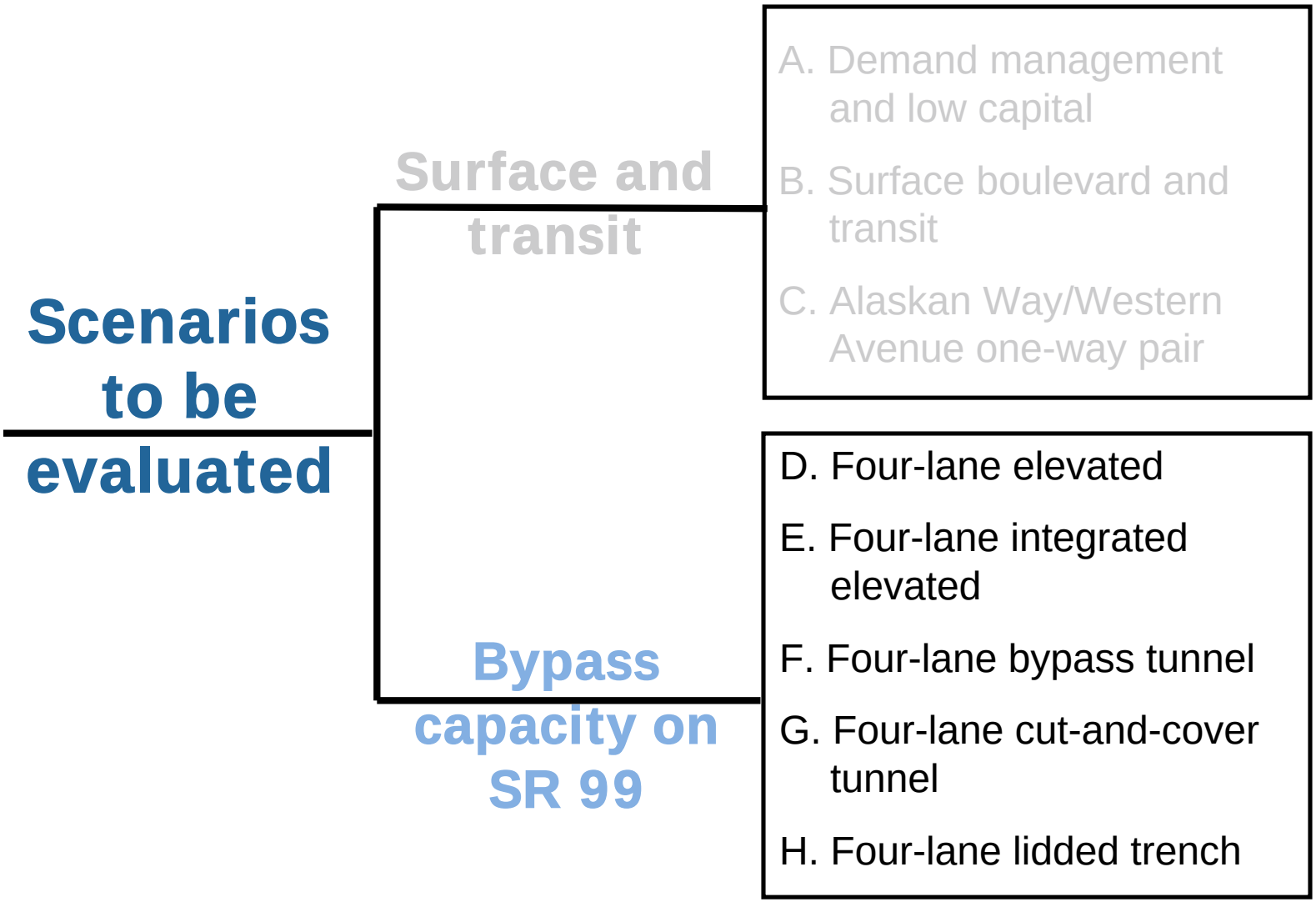


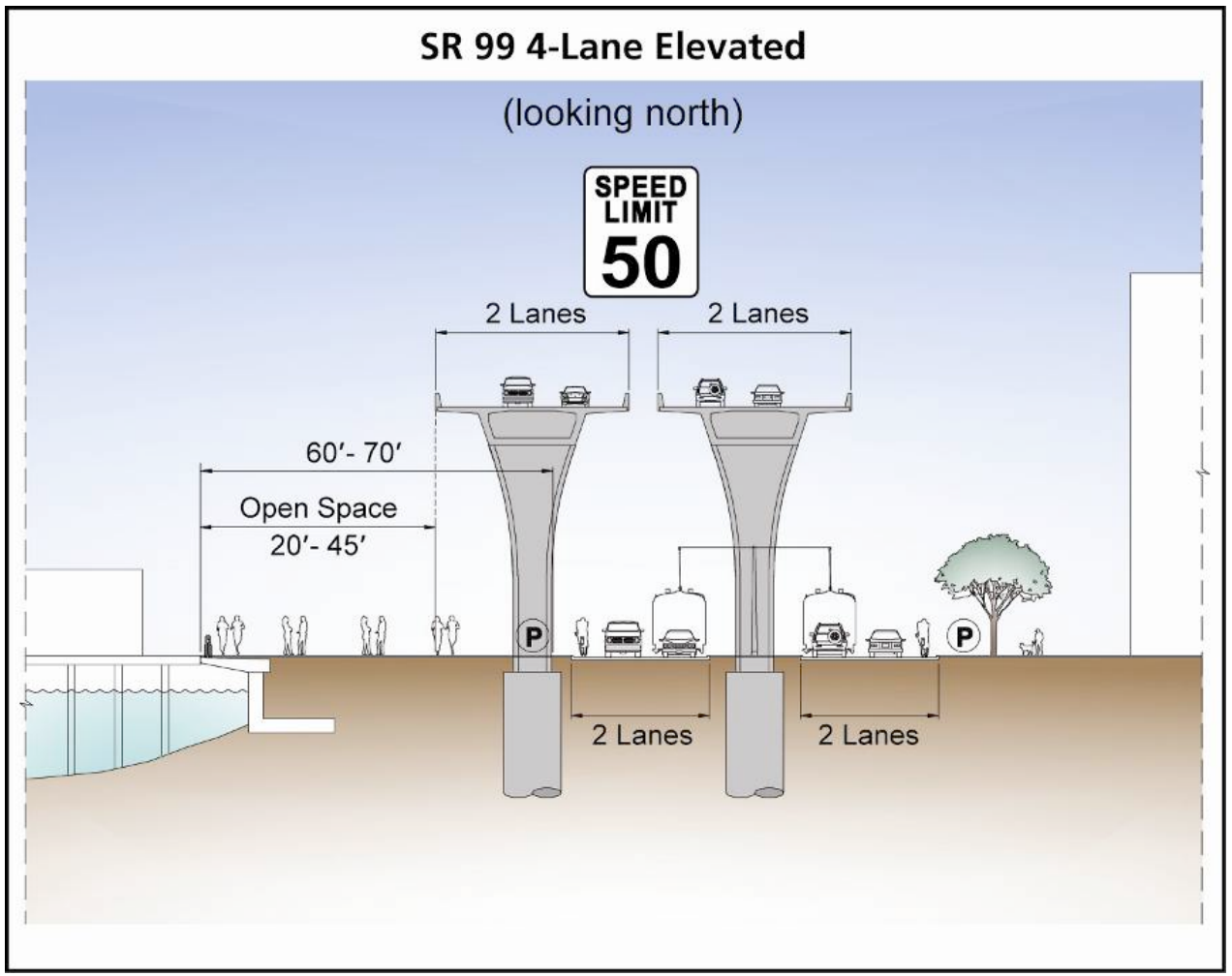
Central waterfront project

Draft scenarios



Central waterfront project

Scenario D: Four-lane elevated



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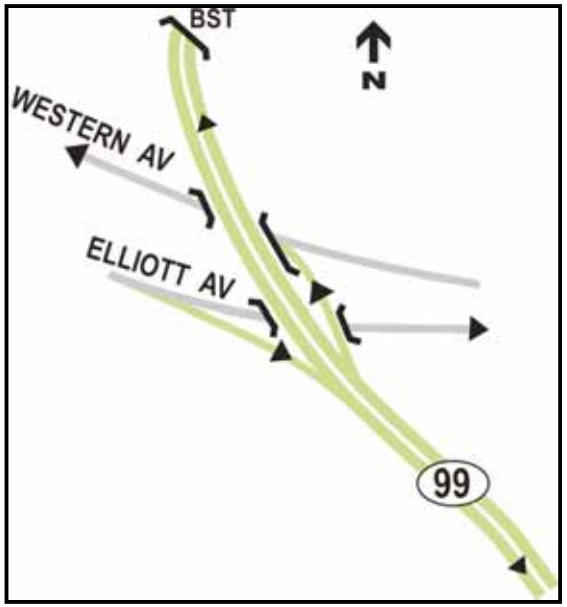
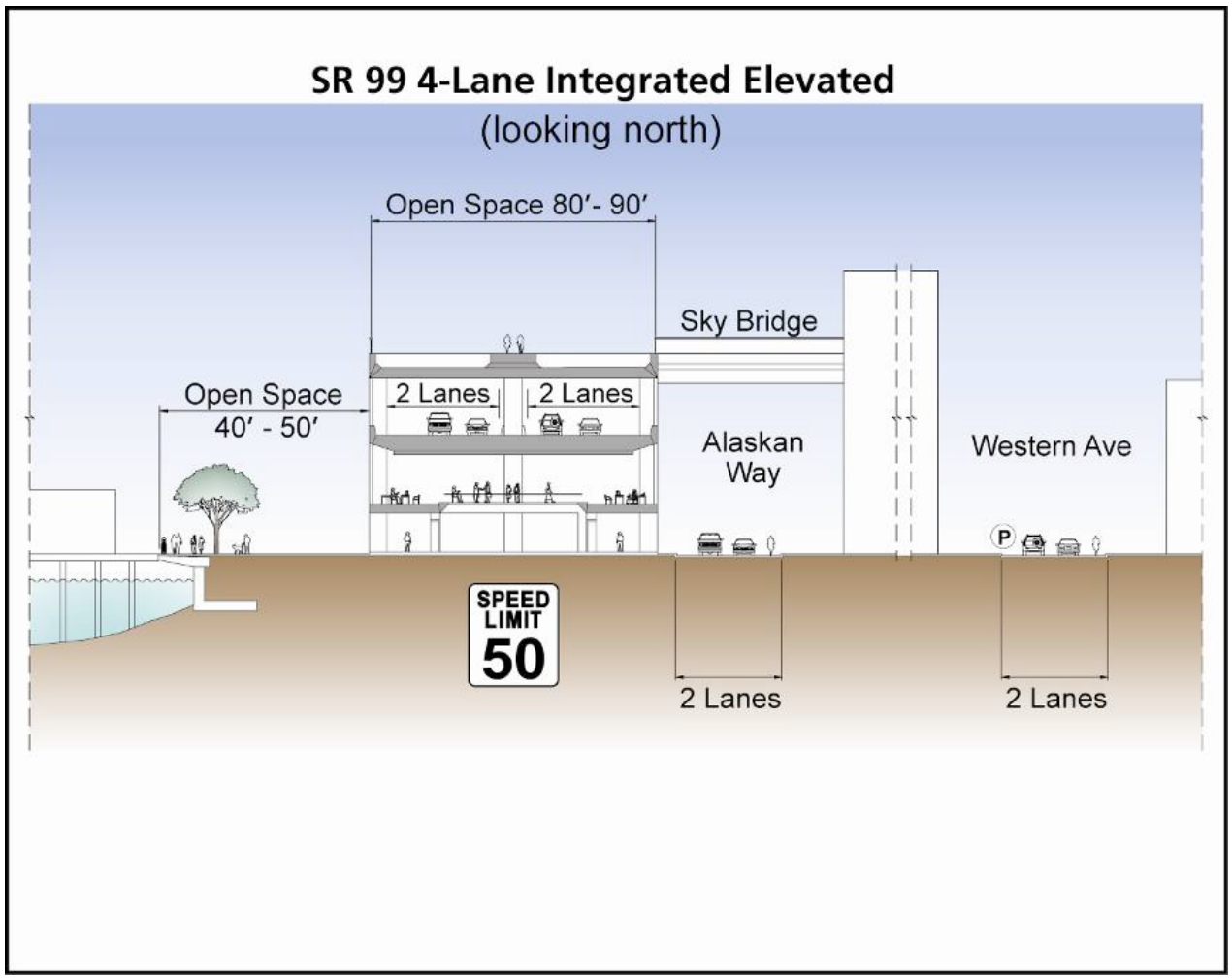


Central waterfront project

Scenario E: Four-lane integrated elevated



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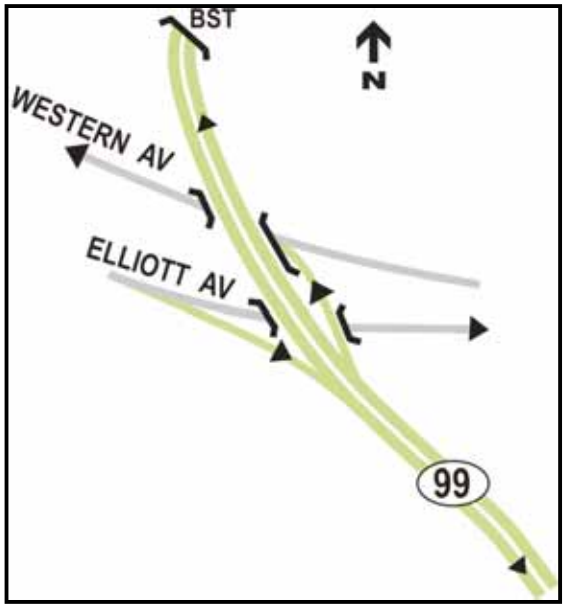
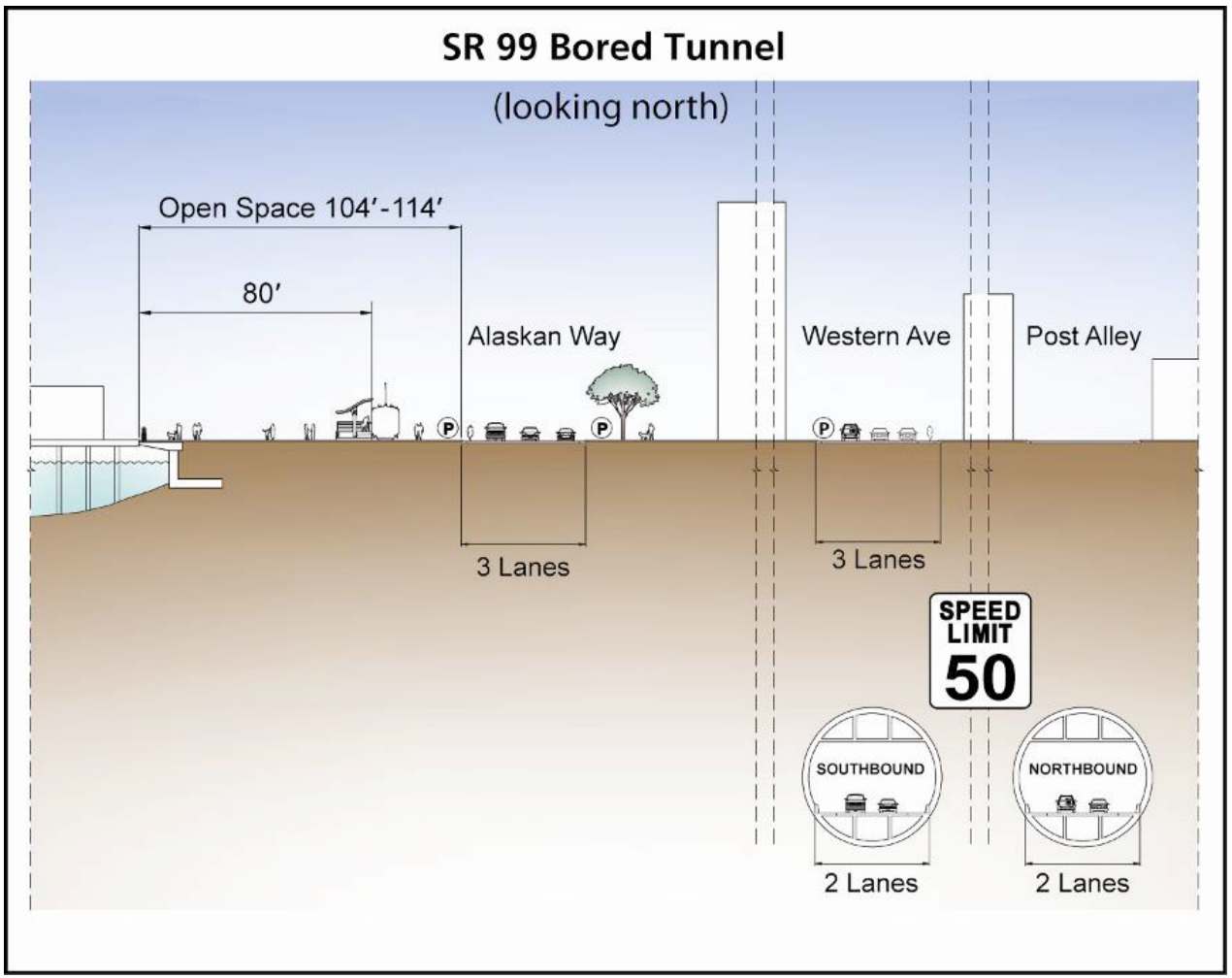


Central waterfront project

Scenario F: Four-lane bypass tunnel



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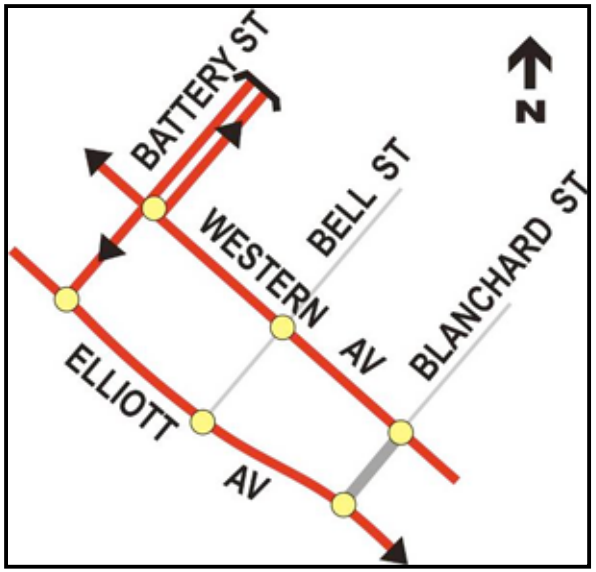
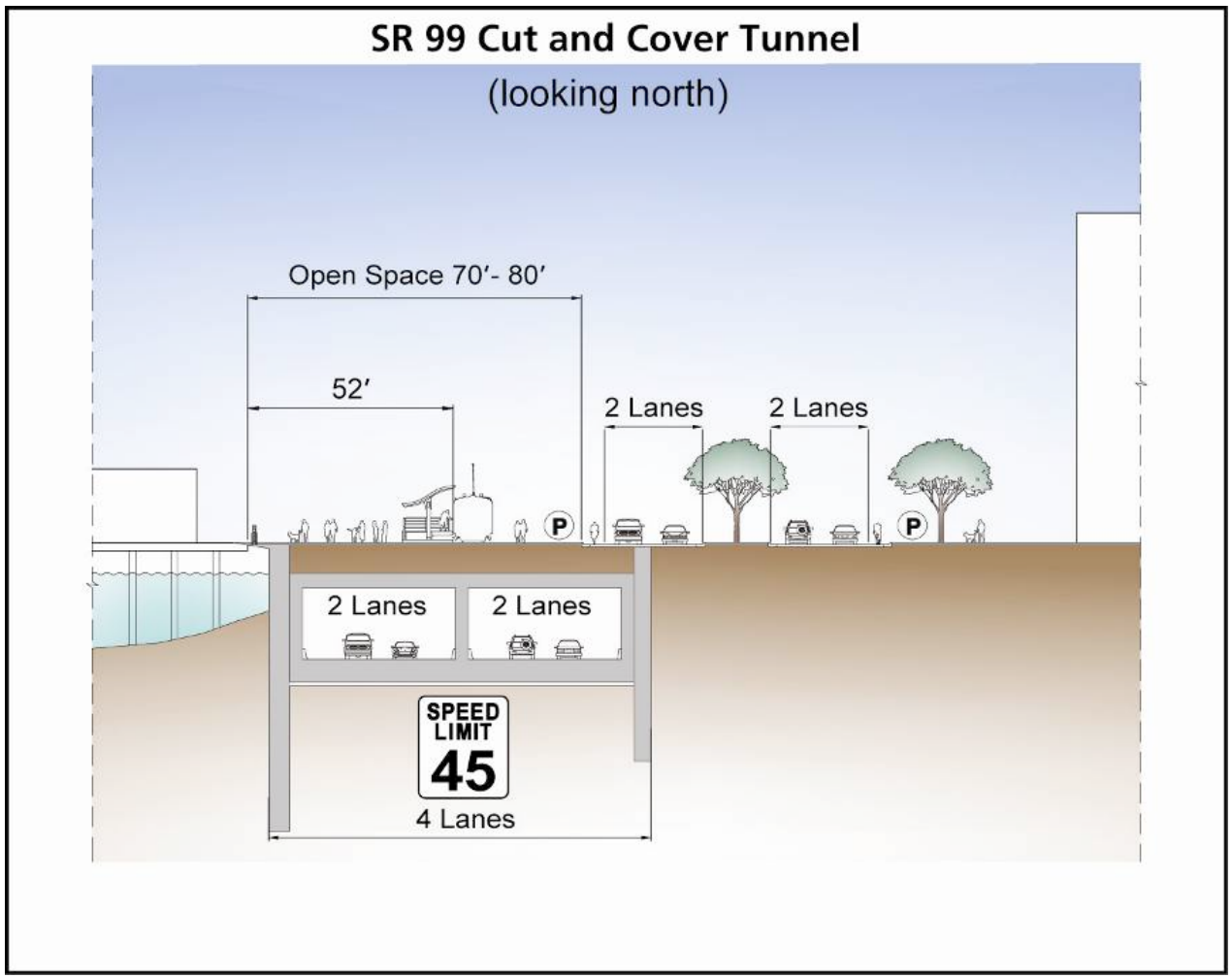


Central waterfront project

Scenario G: Four-lane cut-and-cover tunnel



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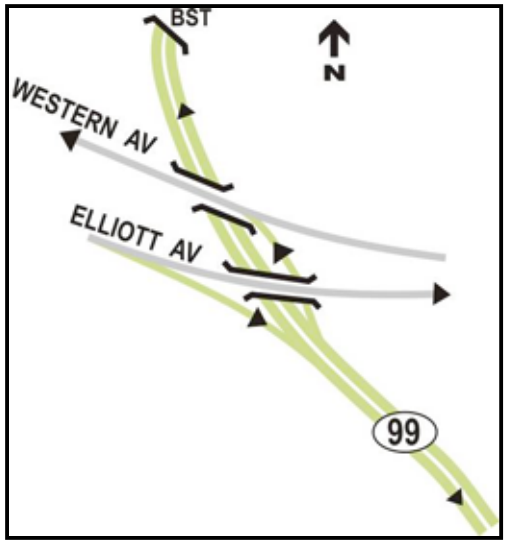
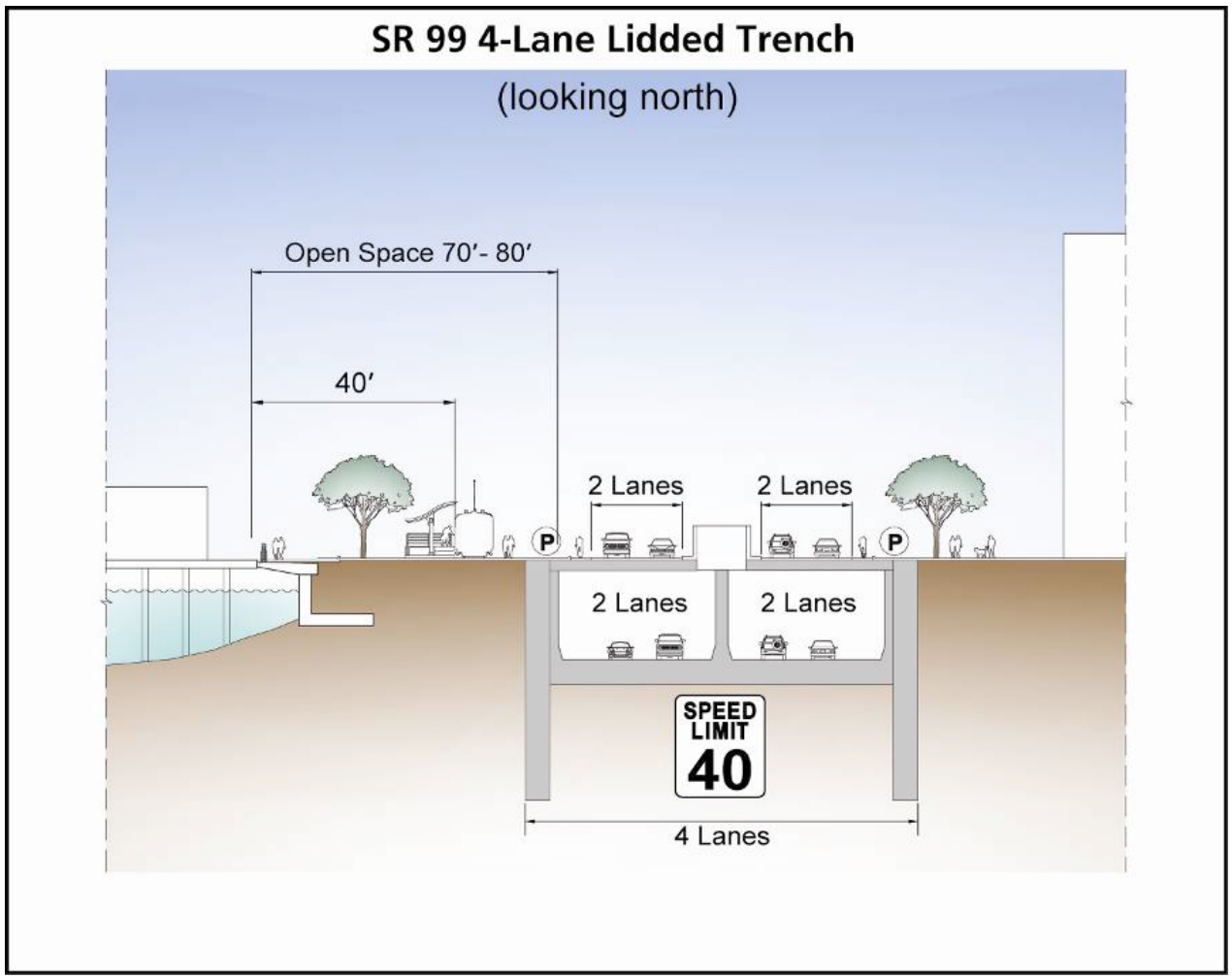


Central waterfront project

Scenario H: Four-lane lidded trench



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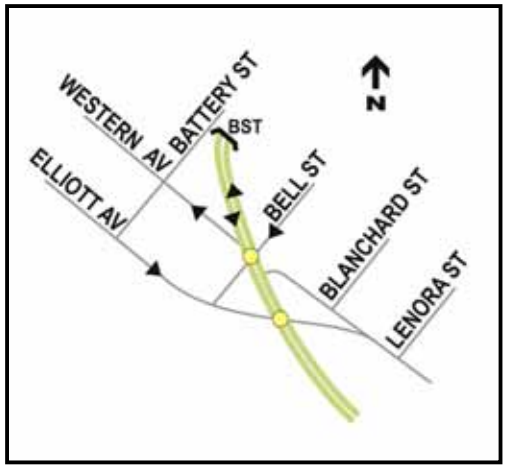


Central waterfront project

Initial evaluation results

Guiding Principle #1
Improve public safety

- Seismic

Guiding Principle #4
Enhance Seattle's waterfront, downtown and adjacent neighborhoods

- Shading and views
- Historic resources
- Waterfront transit access

Guiding Principle #5
Create solutions that are fiscally responsible

- Design life

Guiding Principle #6
Improve the health of the environment

- Stormwater
- Nearshore habitat

Central waterfront project

Travel model evaluation results

Guiding Principle #2: *Provide efficient movement of people and goods now and in the future.*

- All of the scenarios accommodate travel growth through 2015.
- Today there are approximately 1.7 million person trips traveling within, to, from, or through the Center City each day.
- Regardless of what happens, person trips increase to 2 million by 2015.
- Scenarios with a bypass provide an additional route for person trips through the Center City, serving up to 8% more through person trips compared to surface scenarios.
- The number of Center City person trips does not change significantly among the scenarios.
- Through person trips for any scenario are a small percentage of all person trips on Center City facilities.

Central waterfront project

Travel model evaluation results (continued)

What did we learn about peak period travel times for general purpose traffic?

- Those vehicles that rely on the Alaskan Way Viaduct today to travel through downtown will be most affected regardless of the scenario.
- Peak period I-5 operations are comparable under all the 2015 scenarios. Improvements proposed for I-5 are able to handle some growth in travel, with peak travel times only slightly longer than today.
- The systems approach makes a difference in managing travel times for trips to the Center City.

Central waterfront project

Travel model evaluation results (continued)

What did we learn about peak period travel times for transit?

- If we improve transit in key Center City markets, people will ride it. Transit plays a vital role in all scenarios. For some trips, transit is as fast as vehicle trips.
- There are approximately 196,000 transit trips within, to, and from and through the center city each day. This will increase to 274,000 trips in the 2015 Base scenario.
- Future transit travel times with the systems improvements become more competitive with vehicle trips.

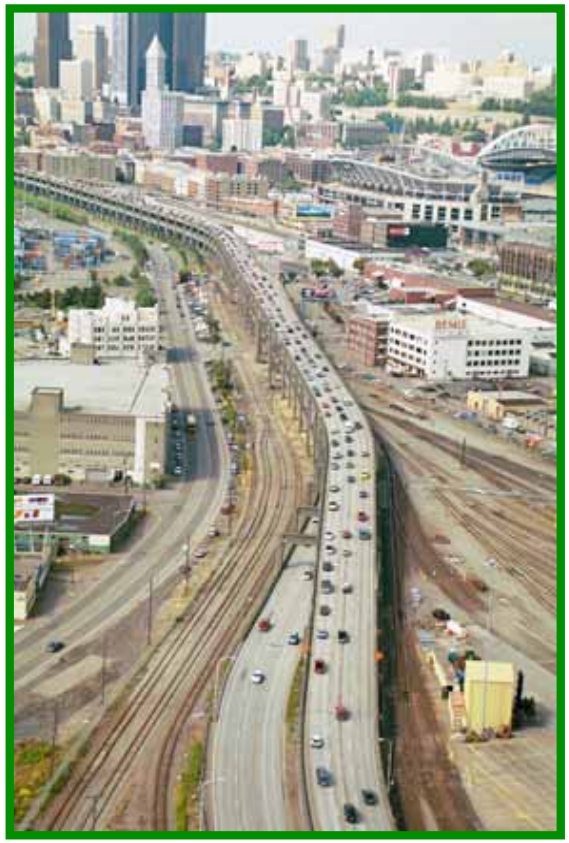
What did we learn about freight travel times?

- The routes used by freight are retained in all of the scenarios. All the scenarios add features to improve freight travel.
- The addition of numerous signalized intersections for surface scenarios adds time for through trucks, as they are subject to potential stop and go operation.
- Freight served by the SR 99 corridor is most impacted by the removal of the viaduct.

Next steps

- November 2008 - Central waterfront scenario evaluation
- December 2008 - Central waterfront recommendation to executives
- May 2009 - Start of S. Holgate to S. King Street construction
- Fall 2009 - I-5 variable speed safety project construction
- Fall 2009 - Start of Battery Street Tunnel upgrades

Alaskan Way Viaduct and Seawall Replacement Program



Follow our progress: www.alaskanwayviaduct.org

Questions